

Lecture Module - Electrical Instruments

ME3023 - Measurements in Mechanical Systems

Mechanical Engineering
Tennessee Technological University

Topic 2 - Prototype Circuits

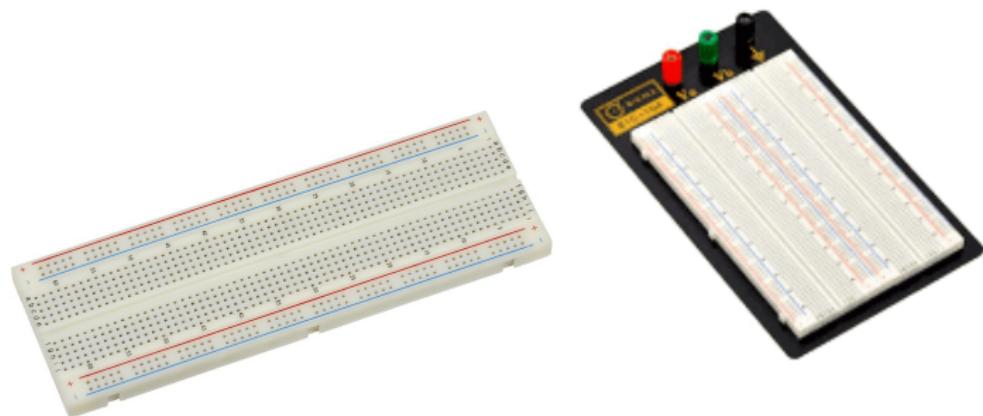
Topic 2 - Prototype Circuits

- Circuits for Mechanical Engineers
- Using a Solderless Breadboard
- Using a Desktop Power Supply
- Examples

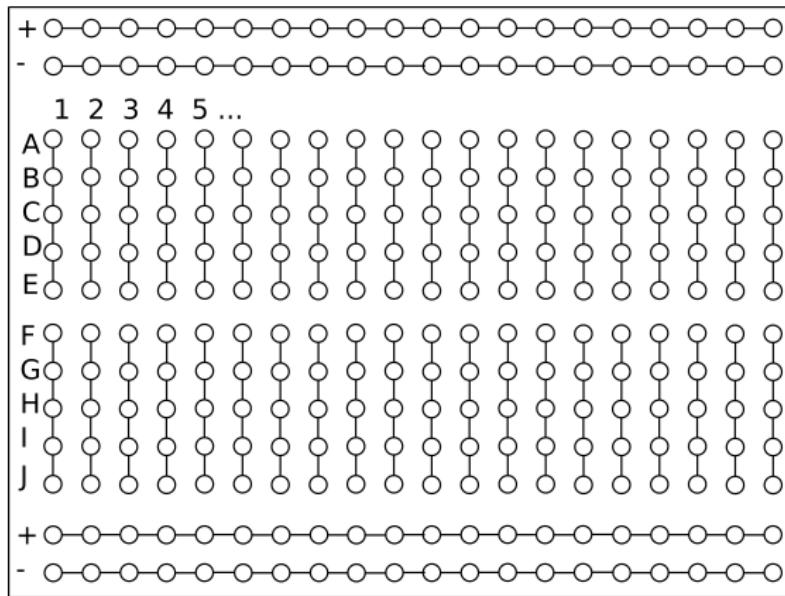
Circuits for Mechanical Engineers

Engineering is an integrated field...

Using a Solderless Breadboard



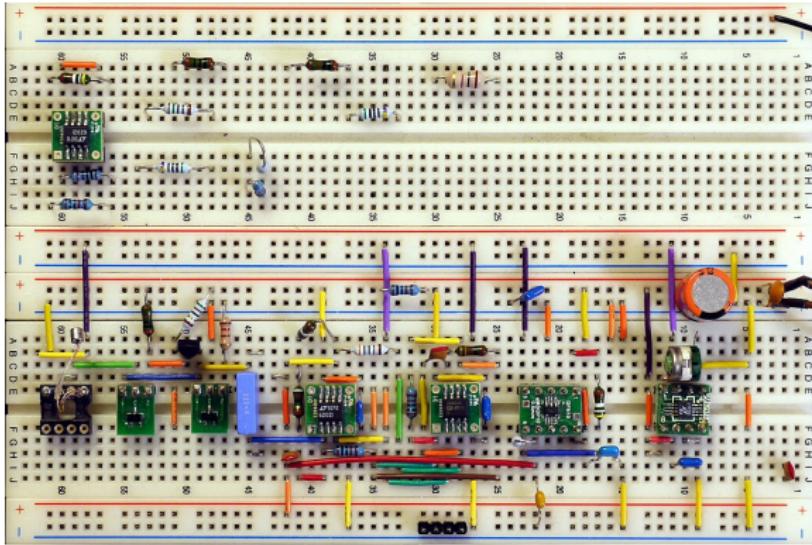
Using a Solderless Breadboard



Using a Solderless Breadboard

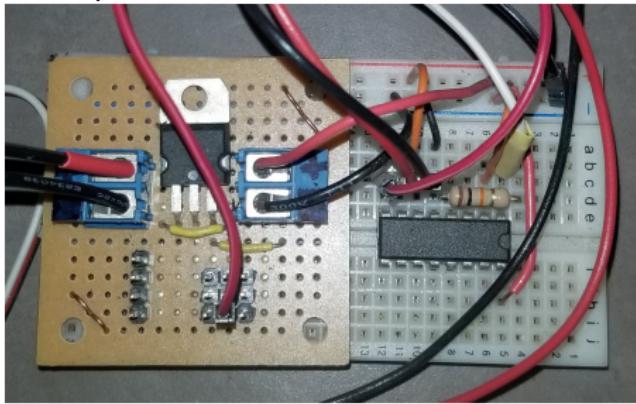
Example 1:

Question: Why is the breadboard separated into sections? (note: this image shows 4 - top, bottom, top, bottom)



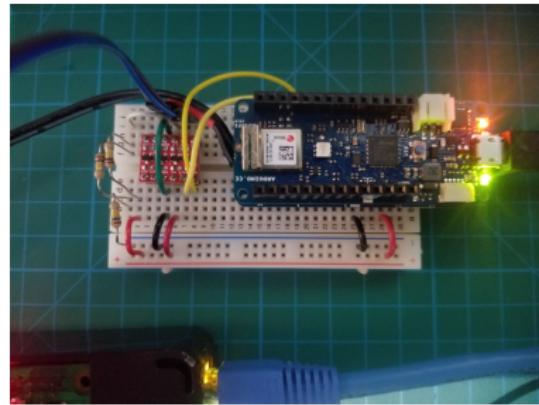
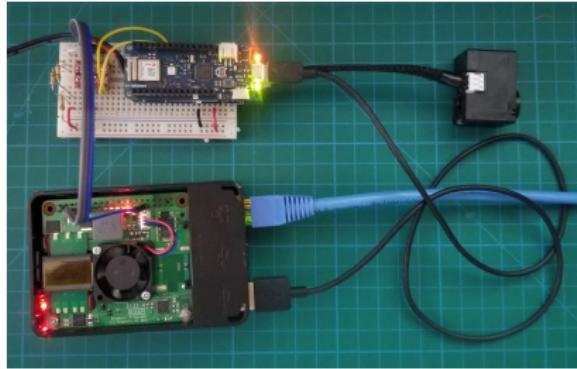
Using a Solderless Breadboard

Example 2:



Using a Solderless Breadboard

Example 3:



Using a Solderless Breadboard

Pros:

Cons:

Common Mistakes:

Using a Desktop Power Supply



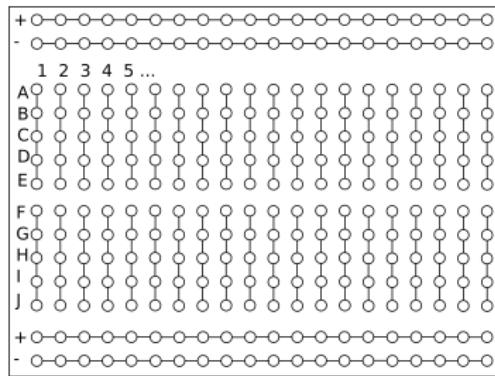
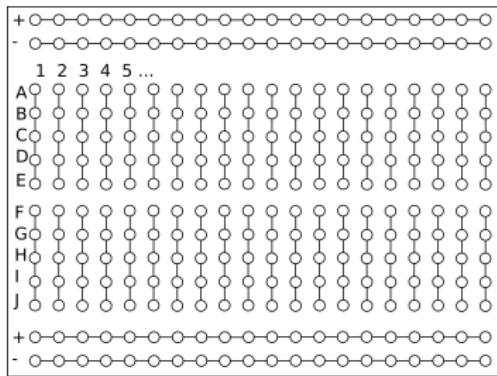
Using a Desktop Power Supply



Using a Desktop Power Supply

- - Safety
- - Damage
- - Control

Examples



Examples

